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SUGIYAMA KAZUHIKO****(54) WELD HEAD, WELDING EQUIPMENT AND
WELDING METHOD****(57) Abstract**

PURPOSE: To perform highly clean welding by arranging annular members rotatably with columnar metallic members to be butt-welded as a center and fixing plural discharge electrodes toward the columnar metallic members on the annular members.

CONSTITUTION: The annular members 102 and 102' are rotated by a gear 105 and pipes 103 and 103' are subjected to butt welding while the electrodes 101 and 101' fixed on the annular member 102 and 102' are rotated. The annular members 102 and 102' and the pipes 103 and 103' are covered by outer frames 104 and 104' and shielding gas is introduced into the inside in advance. Since the pipes 103 and 103' are welded at the same time at plural places, shrinkage in accordance with melting at the early stage of welding is evened off at the cross sections of the pipes 103 and 103' and a gap is not generated on a butt part. Thus, particles in a welding atmosphere are prevented from mixing in and welding free from strain can be performed.

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